

# UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/044,229	01/10/2002	Youngtack Shim	023-008-USU	8987
7590 04/07/2005 Youngtack Shim 19500 Pruneridge Avenue, Apt. No. 10206 Cupertino, CA 95014			EXAMINER	
			ALOMARI, FIRAS B	
			ART UNIT	PAPER NUMBER
			2136	
			DATE MAILED: 04/07/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
		10/044,229	SHIM, YOUNGTACK			
Office Action Summary		Examiner	Art Unit			
		Firas Alomari	2136			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
   1)⊠ F	Responsive to communication(s) filed on 10 Ja	nuary 2002.				
	This action is <b>FINAL</b> . 2b) This action is non-final.					
3)□ S	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Dispositio	n of Claims					
4) Claim(s) <u>1-20</u> is/are pending in the application.						
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) 🗌 C	5) Claim(s) is/are allowed.					
6)⊠ (	6)⊠ Claim(s) <u>1-20</u> is/are rejected.					
7) 🗌 🤇	7) Claim(s) is/are objected to.					
8) 🗌 (	8) Claim(s) are subject to restriction and/or election requirement.					
Applicatio	n Papers					
9) The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☒ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority un	ider 35 U.S.C. § 119					
<u></u>						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
<ol> <li>Certified copies of the priority documents have been received.</li> <li>Certified copies of the priority documents have been received in Application No</li> </ol>						
3. Copies of the certified copies of the priority documents have been received in this National Stage  3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
		,				
Attachment/-						
Attachment(s	of References Cited (PTO-892)	4) 🔲 Interview Summar	v (PTO-413)			
	of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail [	Date			
3) Informa	ation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) No(s)/Mail Date	5) Notice of Informal 6) Other:	Patent Application (PTO-152)			
J.S. Patent and Trad PTOL-326 (Rev		tion Summary F	Part of Paper No./Mail Date 20050331			

Application/Control Number: 10/044,229 Page 2

Art Unit: 2136

#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 112

- The following is a quotation of the second paragraph of 35 U.S.C. 112:
   The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 2. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term "optical uncoupling" in claim 8 is a omnibus term which renders the claim indefinite. The term "optical uncoupling" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. What is meant by the term is not clear the examiner will interpret the claims to their broadest reasonable interpretation until a more clear presentation of the claims has been displayed.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35
 U.S.C. 102 that form the basis for the rejections under this section made in this
 Office action:

A person shall be entitled to a patent unless -

Art Unit: 2136

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Mooney et al. US (5,610,981).

Regarding claim 1: Mooney discloses a data storage system for allowing an authorized user to process data stored therein and for preventing an unauthorized user from accessing said data,( Col 3, Lines 16-21) said system comprising:

at least one storage member configured to store said data therein; (Col 5, Line 66 through Col 6, Line 2 and items 113 and 280 of FIG3)

at least one process member operationally coupled to said storage member and configured to process said data stored in said storage member; (items 290 and 220 of FIG 3 and Col 7, Lines 16-23) and

at least one guard member (item 230 of FIG. 3) operationally coupled to said storage member and configured to effect at least one of degradation of at least a portion of said storage member and degradation of at least a portion of said data stored in said storage member. (Col 8, Lines 41-47)

Regarding claim 2: Mooney discloses the system of claim 1, wherein said storage member includes at least one of a magnetic unit configured to use magnetic characteristics to store said data therein (items 113 and 260 in FIG 3)

Art Unit: 2136

and an optical unit configured to use optical characteristics to store said data therein. (Col 17, Lines 35-44)

Regarding Claim 3: Mooney doesn't explicitly disclose the system of claim 1, wherein said process member includes at least one of a magnetic head and an optical head, each of said heads configured to perform processing of at least a portion of said data. However this deemed to be inherent to any magnetic and optical storage devices which require a magnetic/optical head capable of reading and writing data on the storage device. The system would be inoperable if there is no magnetic head to process magnetic storage devices and an optical head to process optical storage devices.

Regarding Claim 4: Mooney discloses the system of claim 1 further comprising at least one access member configured to perform detection of at least one unauthorized attempt to access said data by said unauthorized user. (Col 8, Lines 38-41 and Col 9, Lines 14-17)

Regarding claim 15: The system of claim 1, wherein said guard member includes at least one power supply unit configured to supply said guard member with at least one of electric power and mechanical power to effect said degradation. (Col 5, Lines16-18 and item 119 of FIG 1B)

Art Unit: 2136

Regarding claim 16: Mooney discloses data process system for receiving a data storage device, for allowing an authorized user to store to said data storage device and to access data stored therein, and for preventing an unauthorized user from accessing said data, said system comprising: at least one receiver member configured to receive said data storage device; (Col 5, Line 66 through Col 6, Line 5) at least one process member operationally coupled to said receiver member and configured to process said data stored in said storage device received by said receiver member; (Items 290 and 220 of FIG 3 and Col 7, Lines 16-23) and at least one guard member operationally coupled to said receiver member and configured to effect at least one of degradation of at least a portion of said data storage device and degradation of at least a portion of said data storage device. (Item 230 of FIG. 3 and Col 8, Lines 41-47)

Regarding claim 17: A method for allowing an authorized access by an authorized user to data stored in a storage member and for preventing an unauthorized access by an unauthorized user to said data, said method comprising the steps of: detecting an unauthorized attempt to access said data by said unauthorized user;(Col 8, lines 38-45 and Col 9, lines 14-17) and degrading at least a portion of said data before said unauthorized user accesses said data. (Col 16, lines 24-34 and Col 8, lines 45-58)

Page 6

Art Unit: 2136

#### Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 5-11, 14-14 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mooney et al. US (5,610,981) in view of Hsu (4,325,089).

Regarding claim 5 and 18: Mooney discloses the system of claim 4, wherein said unauthorized attempt includes at least one of receiving an invalid login signal by said unauthorized user (Col 2, Lines 39-47 and Col 9, Lines 14-17) but he doesn't disclose the unauthorized attempt including movement of said storage member, uncoupling of said storage member from an article coupled thereto, and disassembly of said storage member. However Hsu discloses a system for protecting data from unauthorized physical access to data storage devices where he shows using a sensor for detecting movement of storage device (Col 3, lines 33-37 and Col 4, lines 8-21); a sensor for detecting uncoupling of storage device (Col 3, Line 60 through Col 4, line 7) and a sensor for disassembly of storage device(Col 3, Lines 37-49). Therefore it would have been obvious to an ordinary skilled in the art at the time the invention was made to modify Mooney's

Art Unit: 2136

system with the teachings of Hsu to include detecting unauthorized attempts by receiving signal due to movement of the storage device, uncoupling of the storage device and disassembly of the storage device as well as receiving invalid logon signal. One would be motivated to do so in order to enable the system to provide additional security measures against physical access to the storage devices by destroying the storage device so it can't be used on a different system.

Regarding Claim 6: Mooney discloses the system of claim 5, wherein said receiving said invalid login signal includes at least one of receiving said invalid login signal for a pre-determined number of times and receiving said invalid login signal for a pre-determined period( Col 2, Lines 14-17 and Col 13, line 66 through Col 14, line 16).

Regarding Claim 7: Mooney doesn't discloses the system of claim 5, wherein said movement of said storage member is with respect to at least one of ground, said process member, said guard member, and said system. However Hsu discloses said movement of said storage device is with respect to at least process member, member, and system (Col 3, lines 33-37 and Col 4, lines 8-21). Therefore it would of been obvious to ordinary skilled in the art at the time the invention was made to modify Mooney system with the teaching of Hsu to sense movements of the storage device in respect to at least process member, member, and system. One would be motivated to do so in order to enable the

Art Unit: 2136

system to provide additional security measures against physical access to the storage devices and against tampering of the system by destroying the storage device so it can't be used on a different system.

Regarding claim 8: Mooney doesn't discloses the system of claim 5, wherein said uncoupling of said storage member from said article is at least one of electrical, optical, and mechanical uncoupling of said storage member from said article. However Hsu discloses uncoupling of storage member is electrical, mechanical and optical uncoupling of storage device (Col 3, Line 60 through Col 4, line 7 and Col 3, Lines 37-49). Therefore it would have been obvious to ordinary skilled in the art at the time of the invention was made to modify Mooney's system with the teaching of Hsu to detect electrical mechanical and optical uncoupling of the storage device. One would be motivated to do so in order to enable the system to provide additional security measures against physical access to the storage devices and against electrical, mechanical and optical tampering of the system allowing the system to destroy the storage device so the data can't be retrieved on a different system.

Regarding claim 9: Mooney doesn't explicitly disclose the system of claim 5, wherein said storage member includes at least one memory unit and a housing, wherein said memory unit is configured to store said data at least one of magnetically and optically, wherein said housing is configured to retain at least a substantial portion of said memory unit therein, and wherein said disassembly of

Art Unit: 2136

said storage member is to expose at least a portion of said memory unit out of said housing. However Hsu discloses a system for safeguarding data comprising a memory device and a housing unit wherein housing is configured to retain memory device therein ( Col 2, Lines 32-42) and he shows the disassembly of the storage unit is to expose the storage unit out of the housing (Col 3, Lines 37-49). Therefore it would been obvious to one ordinary skilled in the art at the time the invention was made to modify Mooney's system with teaching of Hsu to include a housing unit to contain the storage devices and to monitor unauthorized attempt by detecting disassembly of the storage device from the housing unit. One would be motivated to do so in order to enable the system to provide additional security measures against physical access to the storage devices and against electrical, mechanical and optical tampering of the system allowing the system to destroy the storage device so the data can't be retrieved on a different system.

Regarding claim 10: Mooney discloses the system of claim 5, wherein said guard member is operationally coupled with said access member and configured to effect said degradation at least one of upon and after said detection of said unauthorized attempt. (Col 8, lines 38-58; Col 9, lines 14-17 and Col 16, lines 24-34)

regarding claim 11: Mooney doesn't disclose the system of claim 10, wherein said guard number is configured to generate magnetic field around at least a

portion of said storage member to effect said degradation. However Hsu disclose generating a magnetic field around a portion of the storage device upon detecting unauthorized attempt ( Col 1, Lines 54-68 and Col 2, Lines 1-7). Therefore it would have been obvious to one ordinary skilled in the art at the time the invention was made to modify Mooney's system with the teaching of Hsu to generate magnetic field around at least a portion of said storage member to effect said degradation. One would be motivated to do so to enable the system to destroy data on a magnetic storage device upon determination of unauthorized access thereby retrieving of data by unauthorized means is prevented.

Regarding claim 13: Mooney discloses the system of claim 10, wherein said guard number is configured to contact at least a portion of said storage member with at least one chemical agent to effect said degradation. (Col 5, Lines 29-41)

Regarding claim 14: Mooney disclose the system of claim 10, wherein said guard number is configured to mechanically damage at least a portion of said storage member to effect said degradation. (Col 5, lines 29-37 and Col 8, Lines 52-58)

Regarding claim 19: Mooney discloses the method of claim 17, said degrading step including none of the steps of: encrypting at least a portion of said data; and decrypting at least a portion of said data. (Col 9, Lines 17-36)

Art Unit: 2136

5. Claims 12 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mooney et al. US (5,610,981) in view of Hsu (4,325,089) as applied to claims 5-11, 13-14 and 18-19 above, and further in view of Rollhaus et al. US(6,011,772).

Regarding claim 12: The combination of Mooney and Hsu teaches degrading the storage medium using mechanical, chemical and magnetic means but doesn't disclose the system of claim 10, wherein said guard number is configured to irradiate amplified light rays to effect said degradation. However Rollhaus discloses a method for inhibiting the reading of optical storage mediums where he teaches using an amplified light beams to destroy data on the disk (Col 10, Lines 26-51). Therefore it would have been obvious to one ordinary skilled in the art at the time the invention was made to modify the system of Mooney and Hsu with the teaching of Rollhaus to include degrading of data using an amplified light beams. One would be motivated to do in order to provide the system with the ability to destroy optical recorded medium upon sensing an unauthorized attempt to access the device without the need to destroy the housing of the disk or the disk reader.

Regarding claim 20: the combination of Mooney and Hsu discloses the method of claim 17, said degrading step including at least one of the steps of: magnetically degrading said portion of said data; (Hsu Col 1, Lines 54-68 and Col 2, Lines 1-7) chemically degrading said portion of said data; (Mooney Col 5, Lines 29-41) and

mechanically degrading said portion of said data (Mooney Col 5, lines 29-37 and Col 8, Lines 52-58) but doesn't teach optically degrading said portion of said data. However Rollhaus discloses a method for inhibiting the reading of optical storage mediums where he teaches using an amplified light beams for degrading data on the disk (Col 10, Lines 26-51). Therefore it would have been obvious to one ordinary skilled in the art at the time the invention was made to modify the system of Mooney and Hsu with the teaching of Rollhaus to include degrading of data using an amplified light beams. One would be motivated to do in order to provide the system with the ability to destroy optical recorded medium upon sensing an unauthorized attempt to access the device without the need to destroy the housing of the disk or the disk reader.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Firas Alomari whose telephone number is (571) 272-7963. The examiner can normally be reached on M-F from 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, AYAZ SHEIKH can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 10/044,229 Page 13

Art Unit: 2136

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Firas Alomari Examiner Art Unit 2136

FΑ

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

ymplind